RMIS Login, Data Collection and Estimation Module Transcript:

<u>Meet the Instructor:</u>
Hi, I'm Tami Torres and I'm the Outdoor Recreation Planner in Taos, New Mexico. I've been working with the RMiS team for four years. The resource that we're most proud of managing in the Taos office is the Rio Grande. It's one of the eight charter rivers designated with the passing of the Wild and Scenic Rivers Act. I grew up in Nessa, Oregon and I went to school at Oregon State University, where I earned my Masters Degree in Forest Social Science. My first recreation job was at Yaquina Head Outstanding Natural Area and that's located along the Oregon Coast. In my spare time I like to mountain bike, and go hiking and spend time with my family.

<u>Introduction to RMIS:</u>
At the end of this section, you will be able to navigate in various screens of the RMIS database. You will learn to log in to the system and the training system, enter or update your contact information, navigate to screens in the database, edit the Office Information page and edit a Resource Management Area information page.

You will learn to collect visitor use data using standard data collection methods, such as special recreation permits, recreation use permits, vehicle counters, trail registers and visitor surveys.

You will also learn to estimate visitor use applying given techniques. I will show you how to calibrate vehicle counters, determine non-compliance rates for trail registers and recreation use permits, extrapolate outside of a data set, and randomize.

<u>Login and Navigation:</u>
Before anything else, you need to get access to the BLM Application Security System, known as BASS. To get access, fill out Form 1260-12,

To get the form - Go the Internet and get into the RMIS help page

Type in http://rmishelp.blm.gov
Click on User Guide and Training
Then bring up the 1260 form and print a copy of the form

Now, fill out the USER Information section –
Under LOGIN ACCESS Detail, check the 'Yes' box across from RMIS Production, circle the appropriate Role for yourself whether it be Washington office, state office or field office; then sign it and have your supervisor and IT Security Manager sign it. The completed form should be Faxed to the number at the top of the form. If you have trouble with the RMIS Help page or the form – contact your RMIS lead.

Once you have access to BASS, you will be able to log in and use RMIS Production and RMIS Training. Type in the web address for BASS – which is https://web.bass.blm.gov:8601/bass2/login.do?
The login and password are the same as what you use to log in to the network at your desk at BLM. This means when you change your network password, it automatically synchronizes with BASS.

Once you're in BASS,
You will see at least two applications: RMIS Production and RMIS Training.
Let's click on RMIS Production.

The front page of RMIS is the Office Information Page. From here you can navigate to many other screens within the database which represent various resources in your Field Office – such as - Rivers and Trails. This is the main database where you will enter and save visits, update SRPs, or edit formulas. Now let's log out and get into the training database before we go any further. If you're imbedded within the system at all, it's good practice to go back to the Office page and *then* hit the log out button.

Logging out of RMIS will also log you out of BASS. Log in again and select RMIS Training this time.

What I want to show you here is to actually edit your Office Information page. To get to the Editor page, you need to click on the highlighted text. Now if you're the New Recreation Planner, you need to enter your contact information. In Taos, our area code changed, so I'm going to change that to 575. Once you've made any edits that you need to, use simply click Save. And so now you've edited your Office Information, your contact information, which is right here.

The next thing I'd like to show you is how to edit your RMA page. In Taos, we have four RMAs. Our more concentrated use is in the Rio Chama, Rio Grande and Santa Cruz Lake areas. Taos is our more dispersed area in our office. And again, to get to the Editor page of the RMA, you want to click on the highlighted text. In Taos, we're actually going through an RMP revision, so I want to add our new plan here. To do that, what there is, is a drop down list of all the relevant plans; I want to add a new plan. Taos, Resource, Management Plan, 2010. Hit Save. Oops, I need to add the date that the plan will be signed. Okay, this is an RMP Plan so I want to change that to yes. The only other thing I want to change today is the acreage. The Travel Management Acreage that we have allocated. In Taos, most of our limited-to-existing routes are going to become limited-to-designated routes. So for the Taos Resource Area, I'm going to go ahead and zero this out and add that 19,200 acres to the limited-to-designated. Now that I've done that, I'll want to go back up and hit the recalculate button and what this will do is reflect those changes through the total acreage. So now I can go back up and hit Save. And now, as you can see, I've added the Management Plan today and I changed my acreage.

So, one more thing I want to show you for navigation is how to get to your sites so that you can enter your use estimates. So I'm going to go over to the Rio Grande RMA and I want to go to Sites. And the Rio Grande is where we have most of our developed sites,

you can see from this drop down list, all the sites that we have. I'm going to go to John Dunn Bridge. Now to get to be able to enter visitor use, I need to click on this button; I've still got John Dunn Bridge selected. I need to hit Add Visits and on this far right-hand side of the screen there's a box where you can add visits; one always is going to show up here and you can just change it or add to it right here and then hit Save. But, we don't have an estimate yet; we need to go out and collect data out in the field. So we need to log out, go back to the Office page, log out and let's go out in the field and collect some data.

Data Collection and Estimation:
First, I want to go through some examples that will illustrate several methods for collecting and estimating data. Estimates of annual visitor use reported in RMIS can be used to observe use patterns over time. This graph illustrates the comparison of use of one river segment with the total commercial boating use on the Rio Grande Wild & Scenic River.   The number of passengers for the Racecourse closely follows total passengers for the Rio Grande because most of the use occurs on this segment. Patterns of use on other Rio Grande segments, is influenced more by time and volume of run-off.

The data used for commercial boating passengers is a total count from the post-use report submitted by outfitters for their Special Use permits. No estimation is required for this count. RUPs or fee envelopes can be used to calculate use where fees are charged at specific sites. The average number of people and participation in various activities can be estimated from information filled in on the envelope as well as through staff observation.

A non-compliance rate must be established, however. Let's work through an example of estimating use from RUPs using a compliance non-compliance rate.   It's Saturday morning and you collect the envelopes from the campground fee station and compare them to the vehicles at your campground. You discover that out of ten vehicles, you only have eight envelopes. You have a 20 percent non-compliance ratio for that day. You go back to your office and record the activities written on the envelopes. The primary activities are sight-seeing, hiking and camping. You will need this information later to build your formulas for all of your sites. Larry will discuss how to create your formulas in another section.

You may decide to use a vehicle counter to collect data at a visitor's center. The traffic counter will tally vehicles and display the total number entering, exiting or both. Now, in order to estimate annual use, you will need to calibrate your counter. Calibration is checking the accuracy of a measuring instrument. It includes settings on the instrument as well as isolating known variables, such as the number of axles, people per vehicle and the percentage of use that comes from staff or maintenance vehicles. Here's one of our park rangers taking a reading off a counter at Wild Rivers.

Now, let's go through an example. Let's say you've set your counter to record each axle and you've learned from observation on a set number of sample hours that the average number of people per vehicle in this area is 2.5.

Now, let's go through an estimation. Let's say you've set your counter to record one axle and you've learned from observation on a set number of sample hours that the average number of people per vehicle in this area is 2.5 and the average number of axles is 2. Your tally is 175,000 for the year. So, if you're counting cars both entering and exiting, then you would divide this by two. Then, multiply the average number of people per vehicle. Finally, subtract the percentage of staff or maintenance vehicles. The estimate you will enter for your site in RMIS is 214,375.

There are a variety of traffic counters available on the market. Some have pneumatic tubes that sit on the surface of the roadbed. The advantage here is easy installation, although you may have to replace the tubes once a year. Inductive loops are buried wires which are vandal-resistant but take more effort to install. Trail counters generally use an infrared beam. With these you will need to keep branches and brush from blowing into the beam. They may be a challenge to install and camouflage in areas with few trees.
With all counters, you will need to check them regularly to make sure that they are working properly. Flooding and temperature extremes sometimes damage them and batteries usually need to be replaced every one to five years.

Trail registers are a fairly low maintenance and easy way to collect data at trail heads, boat launches or visitor centers. Since registering is voluntary, you will need to determine the compliance ratio. To do this, you might randomly sample a set number of hours in a day; weekdays and weekend days in June. Whatever your non-compliance rate is for that sample, you can extrapolate for the remainder of your high-use season. If your compliance was only 31 percent, you will want to add 69 percent to your total from the trail registers. Preprinted recreation area and site register forms, listed in the 8300 series, can be purchased for a low-cost from PMDS. Go to the following website to locate and order forms.

Another method for determining the participation in various activities, which you will need when building your site formulas, is through visitor surveys. Typically, visitors will engage in more than one activity in your rec areas. That's why it's best to ask them what they did as they exit the site or recreation area. Surveys can be a great planning tool in addition to obtaining accurate estimates. You can learn more about where your visitors are from, how often they visit and what their preferences are for information, facilities and the outdoor setting. Surveys can take considerable effort and money to design non-biased questions, to determine sample size and to conduct the survey whether on the ground or by mail. You will need OMB approval before you conduct your survey.

In order to be representative of a population, survey samples are most often generated using randomization. A random sample is a process that ensures each element of a population has an equal chance of being selected. The added benefit is that it allows one to determine the accuracy of an estimate. There are tables available that will tell you the number of people you must survey to represent the views of the population under study at a given reliability or confidence level. One such reference is Hays Statistics for the Social Sciences. It's important to understand the relationship between your population

and your study questions when designing your survey and your sample. Consult multiple references and statisticians to contribute to the design of your survey.

Examples of randomizing are flipping a coin, a lottery, which is basically pulling a number from a hat, using computer generated lists of random numbers, or using a statistical table of random numbers. One of the easiest ways to get a list of random numbers is by using a computer spreadsheet. So, what you could do is go to Microsoft Excel, find the Formulas tab and select it. Go over to the left and select the Insert function. In the Search for a Function box, you'll want to type in List of Random Numbers. Hit Go and it's going to recommend Rand Between, you're going to say OK. It's setting up your formula here, but you need to give it a range of numbers to choose from, so we'll just go from zero to 999, hit OK and it's selected 844 randomly out of that set of numbers. So what you can do is simply copy and paste for as big of a data set as you need. And there's your list of random numbers.

To review what we just did, you're going to need to go into Excel and then find the Formula tab and then go over and select the Insert function. Within the Search for Function box, you're going to want to type in List of Random Numbers and then go ahead and select the Rand Between formula that the spreadsheet will recommend. Then, you'll want to type in your range of numbers and then copy and paste for as large of a data set that you need.

Statistical tables of random numbers can also be found in many statistics text books. To use random lists, number each element of your population from one to the end of the list. Then, randomly choose a starting place and a random numbers table. Now, proceed through the table and select each entry on your list, whose number matches. For example, if you have a list of 1,878 boating passengers, you look at the last four digits of the random numbers and assign them the passengers that match until you get to your sample size.

Now to review all the methods that we've covered in this section, you have SRPs, and vehicle counters which are a direct count, but you'll want to remember that SRPs are only your commercial-use and you need to calibrate your vehicle counters. RUPs and trail registers are both estimates that you're going to need to make by using compliance rates and extrapolation.

Visitor surveys most often use randomization and the benefit that they give you is that they provide a high level of accuracy and you can find out a lot about the preferences of your visitors.

For additional references, we need to go to the database and go to the Information page.

RMIS Help Page:
One last resource I want to show you is the RMIS Information Web Page. It is located at the bottom of the front - Office Information page or you can access it from rmishelp.blm.gov. Click on the link and you will see a list of references on the left hand side of the screen. The RMIS User Guide - is handy for quick answers for solving some of your RMIS questions. Remember here you found the blank 1260 form.

There is a list of Team Contacts
You can get into the Collection and Billing system
You can go to historical reports from the RMIS database over the past 10 years
Or you can go back to the BASS login page.

But, what I want to show you here is the references, one in particular. The one that I find most useful for ideas is Techniques and Equipment for Gathering Visitor Use Data on Recreation Sites. Here you can download the full document or one section at a time. You can also order a bound copy from the Forest Service. Now there are other interesting references here, if you want to compare use with other agencies. There's the surveys done for each forest every year; there's the park service public use statistics; there's directives on the way BLM collects visitor use data; and there's another workbook from the Fish and Wildlife Service with the other techniques for estimation. It's a good reference for you to go to.

Summary Tips:
Okay, we're almost done with this section, but I just want to review what we've covered. You learned to navigate in various screens of the RMIS database.

I showed you how to log in to the system and the training system; enter and update your contact information; navigate to screens in the database; edit the Office Information page; and edit the Resource Management Area Information page.

You learned how to collect visitor use data using standard data collection methods, such as special recreation permits, recreation use permits, vehicle counters, trail registers and visitor surveys. You also learned to estimate visitor use applying given techniques. I showed you how to calibrate vehicle counters, determine non-compliance rates for trail registers and recreation use permits, how to extrapolate and how to randomize.

As a final note, I'd like to remind you to keep a file of your methods so that the next person after you can duplicate.

That's it! I'd just like to wish you good luck in entering your estimates and stop in and visit us sometime in Taos.